

ABSTRACT

Provided are a crucible which prevents polycrystal formation to easily allow growth of optical part material single crystals, and a single crystal growth method employing the crucible.

- 5 The crucible has a smooth surface of about R_{\max} 3.2s as the surface roughness of the wall surface 1H, concave curved plane 1J, cone surface 1F and convex curved plane 1L of the starting material carrying section 1D and the wall surface 1K of the seed carrying section 1E, which constitute the inner surface of the crucible of a crucible body 1A.